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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,173	09/04/2001	Masahiro Ono	Q66097	9845

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SUGHRUE, MION, ZINN,
MACPEAK & SEAS
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037

EXAMINER

VENT, JAMIE J

ART UNIT	PAPER NUMBER
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2621

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/944,173

Applicant(s)

ONO ET AL.

Examiner

Jamie Vent

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 14-16, 18-21 and 23-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 14-16, 18-21 and 23-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 11/15/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,3-7,9-10,14-16,18-21,and 23-26 rejected under 35 U.S.C. 103(a) as being unpatentable by Tenuissen (US 6,512,882) in view of Anderson (US 2003/0206605).

[claim 1]

In regard to Claim 1, Tenuissen discloses a storage and reproduction system for carrying out storage processing and reproduction processing of a transport stream in which coded data is multiplexed, said storage and reproduction system comprising:

- a storage control device for, when a storage command is received, sequentially storing coded data in a storage device, said coded data corresponding to the storage command among inputted transport stream (Figure 1 shows the storage control device wherein data is stored as further described in Column 3 Lines 43+);

- an auxiliary information generating device for analyzing said coded data for each access unit that is an access unit during random reproduction, and generating auxiliary information containing recording position information contained in the storage device (Figure 3 shows the entry point generation wherein information containing recording position is contained as further described in Column4 Lines 7-26); and
- a reproduction control device using a reproduction command under a predetermined reproduction condition is received, selectively determining the access unit that conforms to the reproduction condition as a reproduction target based on the auxiliary information, and reading out the access unit targeted for reproduction from the storage device, thereby configuring and outputting a reproduction transport stream. (Column 4 Lines 18+ describes the reproduction control device selectively determining the access units for proper storage on various devices within the system); however fails to disclose wherein said reproduction control device configures the reproduction transport stream by assigning each PES packet to the respective access units, and provides the reproduction transport stream with reproduction time information as a PTS of said PES packet, said reproduction time information being for specifying a time for reproducing said access unit targeted for reproduction.

Anderson teaches the use of PES packets used for timing information for the reproduction of the video stream as disclosed in Paragraphs 0013-0015. As described

by Tenuissen and taught by Anderson, the use of time management data is easily provided within the PTS of the PES packet and thereby provides efficient and proper data management processes. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use a system that has storage and reproduction system, and taught by Anderson, to use PES packets for time management.

[claim 3]

In regard to Claim 3, Tenuissen discloses a storage and reproduction system according to claim 1, wherein the reproduction control device newly generates time reference information on a program contained in the reproduction transport stream, and outputs the time reference information with the reproduction transport stream (Column 2 Lines 50+ through Column 3 Lines 1-12 describes the newly generation of time reference information on a program and the outputting of a time reference based on pointer information).

[claims 4 & 16]

In regard to Claims 4 and 16, Tenuissen discloses a storage and reproduction system according to claim 3, wherein the reproduction control device generates reproduction time information for specifying a time for reproducing the access unit targeted for reproduction, and outputs the reproduction time information with the reproduction transport stream (Column 2 Lines 50+ describes the output of time for the reproduction stream).

[claims 5 & 18]

In regard to Claims 5 and 18, Tenuissen discloses a storage and reproduction system according to claim 4, wherein the reproduction transport stream is transmitted by the TS packet, and the reproduction control device generates the reproduction time information based on arrival time information assigned when the respective TS packets are stored (Column 2 lines 43+ describes the transmission of TS packets based on arrival time).

[claims 6 & 19]

In regard to Claim 6, Tenuissen discloses the storage and reproduction system according to claim 4, wherein the reproduction control device generates the reproduction time information in consideration of a frame display replacement in an original video stream of the access unit (Column 2 Lines 40-44 describes the generation of reproduction time information).

[claim 7]

In regard to Claim 7, Tenuissen discloses the storage and reproduction system according to claim 1, wherein the coded data is video data compressed and coded in accordance with an MPEG2 scheme, and the access unit targeted for reproduction contained in the reproduction transport stream is obtained as a single video sequence (Column 2 Lines 65+ describes the compressed and coded data within MPEG 2).

[claims 9, 10, 20, & 21]

In regard to Claims 9, 10, 20, and 21, Tenuissen discloses the storage and reproduction system, wherein the reproduction control device updates a parameter that assigns a storage amount of a virtual input buffer or a decode timing in the access unit targeted for reproduction by referring to a data amount of the access unit, which is targeted for

reproduction and is transferred (Column 4 Lines 27+ describes the updating of parameters assigned to the storage).

[claims 14 & 15]

In regard to Claims 14 and 15, Tenuissen discloses the transport stream reproduction method for reading out a transport stream in which coded data is multiplexed and auxiliary information that contains recording position information of an access unit in a storage device, said access unit being a unit of access during random reproduction of the coded data, and for carrying out reproduction processing of the transport stream, said transport stream reproduction method comprising the processes of:

- selectively determining the access unit that conforms to the reproduction condition as a reproduction target based on the auxiliary information when a reproduction command under a predetermined reproduction condition is received (Column 4 Lines 1-25 describes the selectively determining the access unit);
- reading out the access unit targeted for reproduction from the storage device (Column 4 Lines 25+) ;
- and configuring and outputting a reproduction transport stream (Column 5 Lines 1-15 describes the configuring of the reproduction stream).

[claims 23 & 25]

In regard to Claims 23 and 25, Teunissen discloses a system wherein the storage and reproduction system according to claim 1, wherein said predetermined reproduction

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condition is a special reproduction, and the access unit used for the special reproduction is a trick access unit, which corresponds to an I picture (Column 1 Lines 15-55 describe the use of special reproduction units).

[claims 24 & 26]

In regard to Claims 24 and 26, Teunissen discloses a system wherein the storage and reproduction system according to claim 23, wherein said trick access unit used for the special reproduction is determined in accordance with judgment of number of TS packet of a transport stream, acquirement of trick access unit auxiliary information based on the judged number, and calculation of reproduction interval AT based on reproduction timing of the trick access unit (Column 2 Lines 20+ describes the use of TS packets for judging and calculating the trick access).

Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tenuissen (US 6,512,882) in view of Anderson (US 2003/0206605) in further view of Hayami et al (US 2002/0085644).

[claim 2]

In regard to Claim 2, Tenuissen discloses a storage and reproduction system according to claim 1; however fails to disclose the reproduction control device newly generates configuration information on a program contained in the reproduction transport stream, and the reproduction transport stream, and outputs the configuration information with the reproduction transport stream. Hayami discloses a system containing a reproduction control device that generates configuration information and thereby outputs the new

configuration information as described in paragraphs 0053-0055. The configuration of new reproduction information allows for proper storage and accessing of the data stream in the system. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the storage system, as disclosed by Tenuissen and further discloses a system wherein reproduction control device configures and generates configuration information, as disclosed by Hayami.

[claim 8]

In regard to Claim 8, Tenuissen discloses the storage and reproduction system according to claim 1; however fails to disclose the coded data on one or more programs having one or more components is multiplexed in the inputted transport stream, and the auxiliary information generating device selectively reconfigures a stream from the inputted transport stream according to designation of the program or component, and generates the auxiliary information where the access unit contained in the stream is defined as an analysis target. Hayami discloses a system containing a reproduction control device that generates configuration information and thereby outputs the new configuration information and target analysis as described in paragraphs 0053-0055. The analysis target provides the system the ability to determine and evaluate the inputted transport stream to provide proper processing of the stream. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the storage system, as disclosed by Tenuissen and further discloses a system wherein reproduction control device configures and generates auxiliary information which provides target analysis, as disclosed by Hayami.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Contact Information

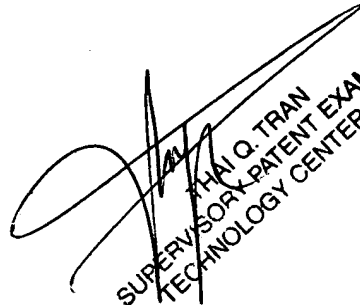
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamie Vent whose telephone number is 571-272-7384. The examiner can normally be reached on 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JJV


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